

# SPRITE CHASER

No. 5

Official Newsletter of the #1 ADAM USERS' GROUP

**THE SPRITE CHASER** is published by the #1 Adam Users' Group for the enjoyment and furthering the knowledge of its members in the use of the Adam Computer system. Address all correspondence to The Editor, #1 Adam Users' Group, P.O. Box 3761, Cherry Hill, NJ 08034. (609) 667-2526

Articles from other newsletters are welcome and will be included to broaden our readerships base of knowledge and experience level. All submissions will be noted and credit given to the author. Articles from this newsletter may be reprinted for use by other user groups so long as the user group in question is an existing viable entity for the benefit of those wishing computer literacy. User groups that exist without a membership at large will not be considered user groups per se. All articles or letters sent to the Editor for publication are subject to the unrestricted right to edit and comment...

**THE SPRITE CHASER** is available by subscription for \$20.00 per year. It is free to members of the #1 Adam Users' Group. Send all subscription payments and/or change of address to #1 Adam Users' Group, Subscription Service, P.O. Box 3761, Cherry Hill, NJ 08034.

It will be the policy of the #1 Adam Users' Group, not to pass, copy, or sell copyrighted text, data packs, diskettes, or any other copyrighted medium thru the Group without the permission of the copyright owner whether by written permission or through the Copyright Clearance Center, 21 Congress St., Salem, MA 01970.

Membership in the #1 Adam Users' Group does not impart to the general membership any corporate authority or status to act for the corporation. Membership in the #1 Adam Users' Group is for one year from the month membership is acquired. Present membership rates are: \$15.00/yr. as of January 1, 1986. Rates are subject to change without notice.

## SPRITE CHASER STAFF:

|                  |                    |
|------------------|--------------------|
| PRESIDENT -      | Jay H. Forman      |
| VICE-PRESIDENT - | Steve George       |
| SECRETARY -      | Michele Lovenstein |
| TREASURER -      | George Rhodes      |

|                      |              |
|----------------------|--------------|
| EDITOR -             | Steve George |
| RESEARCH EDITORS -   | Larry Locca  |
| SOFTWARE LIBRARIAN - | Steve George |

## What's New

Much has happened since the last issue! One of the most important was the release in the Public Domain of a few Coleco titles never released. It seems six or so titles were developed but never actually released to the consumer. Some of these are not finished and contain "bugs". I guess these never got past "beta testing"...(beta testing is when they give people almost finished copies to use, find errors, and make suggestions as to how it could be improved.) Let me go through each one describe them, and tell you how they work.....Also, a word of warning..these titles could be removed from our exchange at any time if Coleco requests it..They also are supplied as is...Super Sub Roc: An authentic "Super Game Pack"...90K, Hall of Fame..Includes an underwater screen with depth charges, subs, mines, torpedoes, and a mechanical "octopus" ..Above surface includes (along with the cart version nasties) guided missiles, PT boats, an aircraft carrier, and F14 (I think) Phantoms..plays REAL nice and haven't found any bugs...

Jeopardy: As good as Family Feud..save-game feature,Hall of Fame winner of bonus gets an ADAM "buck" printed out on the printer..also REAL nice..Haven't seen anything wrong with it either.... Testcart: I guess originally produced for the ADAM when it first came out, a cartridge that one could use to test memory, printer, keyboard, tapedrives, etc. In order to use it, though, ones needs CP/M 2.2 (it's saved in CP/M format) and a 64K memory expander (in the process of test memory, it would overwrite itself if the program resided in the system RAM). Troll's Tale: Originally to be part of a Best of Sierra package (with Jaw Breaker).. a graphic adventure with machine language routines..... screens are drawn in about a second & there's thirty or more different screens..not a bad game...I am not sure if it runs off tape (it might need a "right" directory DDP..this is same as the Buck Rogers and BASIC tapes..games, applications load from the right side of the tape...as opposed to the center directory of later tapes)...Video Hustler: A cart that was going to be released (I do not know why it WASN'T)...plays pool..pretty accurate..REAL fun...Best of Electronic Arts: Actually two games in one..Pinball Construction Set (PCS) and Hard Hat Mack...Hard Hat Mack is like Donkey Kong..two or three screens (at least from what I'VE seen) REALfun! PCS is also real nice although it is the most "unfinished" of all the games..With this you can create an "electronic pinball game"..works just like the Apple version, although has better sound..can save games...one feature is not implemented on the version I have, called "Install Logic"..with it, you'd be able to save games on a disk and put the disk JUST to play the games..you would not have the program..(I guess Coleco figured you'd want to share your games, but did not like the idea of sharing the actual program..... actually a pretty good idea)...If anyone has seen a copy that this actually works, let me know..)

In the works: BASIC 2.0..I have seen a copy that does have the expanded memory feature working..gives you a 90K buffer for Basic programs..Only thing is it is not fully compatible with 1.0...Eventually, this should make it the Public Domain. A 5 screen Donkey Kong, Jr.!!! This was an "in house" version..I cannot see why this was not released (it comes up on screen with Revision 13..release version was 14..)..You activate it by holding both joystick buttons down at the first choice screen. On

the keypad you press -"1321212"- the "Caution Master Sequence Activated" .. After 9 or so screens..you come to the "Mario's Kitchen" screen..... I've heard from the real players that with each successive screen,Mario throws something different. I will probably offer this as an upgrade to people who bought the original. You would have to send me the original label. Something is also different about the game. It will only play from a "Right" Directory DDP. These are the earlier tapes that load up from the extreme right side (Buck Rogers)...You'd also have to send \$7 as copying them takes a lot longer than any of the other conversions. Make all checks payable to Steve George!

Also new is some hardware out from Eve Electronics. I have yet to see it and none of our members have written to me with reviews (hint). From a review in another newsletter, I've gathered it is. a rather slick (although expensive) piece. There are 2 models: 1.) VDMB 80\*80 column output under a new ADAM version of CP/M compatible with ADAM CP/M 2.2. \*Independent power supply that replaces the one in the ADAM printer. \*Four expansion slots inside the housing to accommodate the EVE SPI parallel/serial interface card, EVE SSCC Speech, Disk controller, and other expansion units. \*Ports on the back for future expansion (possibly RGB video,etc.) The unit itself is a metal box 7" deep X 14" wide X 4 1/2" high. It also includes a fan inside to keep things cool. The price: \$300 W/O power supply \$280 W/ trade in of PS1: \$270 Also bundled with this unit is a CP/M word processor that uses 80 column format and has Smart.Keys setup, and Z80BASIC, an 80 column BASIC (how compatible it is with SmartBASIC and if graphics/sound capabilities are implemented, I do not know), 2.) MON80 is the other configuration. This unit comes with a built in 80 column MONOCHROME (2 color) monitor. It DOES NOT have power supply or expansion ports. The board goes IN THE ADAM in the second slot. It also sells for \$299. Both Z80BASIC and the CP/M word processor are also included.

They are also going to develop as their next products the following:  
a.) A standard Coleco disk controller to be used with all their software with a good possibility of being 360K (Yay!!!)  
b.) A special CP/M disk controller option to allow use of ANY kind of disk drive (40 Meg hard disk, anyone?)...It will only work with CP/M, but with the amount of stuff out there and the fact that there are a lot of bulletin boards would make this a nice addition.  
c.) An option for the 80 Column Video Board is available right now to enable VT100 (ANSI) and H19 terminal emulation a standard for telecommunications and graphics display.

To find out more contact: EVE ELECTRONICS - 2 VERNON ST., SUITE 404 - FRAMINGHAM, MA 01701 \* (The above information was taken from a review by Lyle Marschand, Editor of NIAD)

Also new (not by the time you read this) is "MultiWRITE" an 80 column simulator. It is a word processor that uses BASIC to load in a new tiny font set. It does show 66 characters across and many down, although it's best seen on a monochrome monitor. A large TV is not so bad, but on my 12" composite monitor, the letters are real small and fuzzy. Look for the review further in this issue.

I have used the best all around utility designed for the ADAM bar none! It is a program called Backup+ 3.0, produced by MMSG (Backup+ 2.0, CopyCart+). I have Quikcopy, Uncle Ernie's, JKL Utilities, Packcopy, many PD copiers and not one of them comes close to Backup+ 3.0!! It is totally ML (loads in 5 seconds) and uses the 64K expansion memory to give you a 102K copy buffer. It will copy separate files (also using wildcards) VERY quickly..(if you use Quikcopy it is MUCH slower!) I makes two kinds of image backups.. "standard" for most DDPs and disks and "special" for Supergames (including DK and DK jr.)...It will copy a right directory DDP to a center and you can play the game without the "Loading" message. It will initialize DDPs and disks and will also format disks! It will copy a SmartBasic tape and convert it to run from disk. A block status display is another option so one can see which blocks are used, empty, or bad. All these features run off the SmartKeys. It costs \$39, but it one of the best programs available!! It is as good as anything Coleco has ever come out with!!

That is about it for now..I've heard many rumors: Among them: A double sided disk drive that will go in the same case as the current disk drive (what a killing someone could make). A 128K, 256K, 512K memory upgrade. A parallel printer interface that goes in the second slot of the ADAM. Possible IBM PC compatibility. Let me know if you "hear anything good".

#### SmartFiler Version 27D Print Fix

Have you ever tried to print labels or a listing of your database with SmartFiler? Frustrating to say the least! As with SmartWriter, the printer "driver" sends a half line feed extra with every return you specify. John from Seattle, called me up and explained the solution. Around block 18 on the SmartFiler tape or disk (MUST be Version 27D!!) is the printer driver routine. As with ANY modifications, you should ONLY modify a copy of the original! With your block-modifier software, load block 18. The address is at 764 (if you are using "MOD", it is at 30764). The byte is currently set to "01" and it can be set to ANY even number to obtain desired effect. To set SmartFiler to print a linefeed, plus two half line feeds, change the byte there to "02". I have not yet tried other combinations. Experiment, and let me know what some other results were. By the way, after you change the byte, write it back to the same block..To give you an idea of what to look for, John explained the 8 bytes starting at location 761 are (in hex):

```
C12E3E01CDD132FE  
:  
:
```

this is the byte to change! Thanks again John for the patch!!

#### Review: MultiWrite by Strategic Software

This is another one of a series of "productivity" software released by Strategic. As with "PaintMaster", "Turboload", and "Powerprint", "MultiWrite" is a more reliable product than previous offerings from this company(in fact, I've heard they no longer sell SmartSpeller"). You need BASIC v79 (just about everyone has this) and a tape or disk drive.

One of the nice things about Strategic's programs is they can be "turbo'ed" to load even faster. You also need a large-screen (19 inches or so) television or a monochrome monitor for the best display.

Essentially, this program simulates an 80-column card. An 80-column card enables one to write a document and "see" what it will look like on the printed page. How many times have you written something in SmartWriter, printed it out, and found it did not look anything like what you thought it would? All serious word-processing is done on an 80-column display. Adam, unfortunately, was "killed" before Coleco released its 80-column card that would enable you to see 80 columns probably in BASIC, SmartWriter, CP/M, ADAMCalc, etc. It was to be under \$150!! An 80-column card is available from EVE for \$300 and it can ONLY be used under CP/M. So you can see why this product could fulfill an important niche in your software library.

You load MultiWrite after booting BASIC. The program "pokes" its own text that is REAL tiny so that you can see 66 spaces or so on the screen. (Very similar to using a font editor and creating your own fonts). The only problem I had with the display is that I only use a color Taxan 210 monitor, this made the tiny font real fuzzy. I've heard that it looks better on a full-sized TV or on a 2-color (monochrome) monitor. It has just about all the features SmartWriter has and more. You can "embed" commands that the printer will not type but contain instructions for centering, right justification (no more ragged edges), and others... You can use documents from Powerprint and convert ones you've already written in SmartWriter. My only other complaint lies with the printer "driver". This is the part of the program that prints the document on your printer. It is the same as the one in Powerprint. It only prints in one-direction and is EXTREMELY slow! Expect a document to take 5 times longer to print than one in SmartWriter. Your document will look much nicer though with MultiWrite, however. It would have been REAL nice if Multiwrite used the 64K expansion ram. When are third party developers actually going to take advantage of this great hardware addition? Many people call me wondering how to access this in BASIC and it can be done! (Are you listening Strategic?) Perhaps if you all (who are buying this software) write to this companies, something can be done about this.

To sum up, I was rather impressed with its reliability (no system crashes or lock-up)...the program worked just like the manual said it would, it is full-featured and comes with an easy-to-read manual. The documents look MUCH nicer than SmartWriter. It is compatible with existing documents and can be "turbo'ed" to load faster. On the negative side, you need a certain kind of display to get the best effect, the print routine is still too slow, and it is not as easy to use as SmartWriter. As with all software there are tradeoffs. One has to decide if it fits their need and base the decision on this. Let me know what you think..I'd be more than welcome to print opposing viewpoints!

#### CP/M Corner - Hints

I thought I would just devote a column to handy hints when using CP/M. Based on the questions I've received, it would be real helpful to some

of you! First of all the best hint I could give you is to get a disk drive (Here we go again!).....Adam's data drives are just too slow when it comes to CP/M..I've had experiences where I was copying a 10K program from a tape to a disk drive, and to copy the CP/M file off the tape took about 15 minutes! I would imagine the CP/M file is stored differently on the tape than on the disk. To copy the same file from disk would take about 25 seconds! The best setup for CP/M is two disk drives (so you do not even use the tape drives) PLUS the 64K memory expansion.

Which brings me to the next hint. The 64K expansion memory acts as a "ram disk". A ram disk is a section of memory that the computer "thinks" is an I/O (input/output) device like a disk drive or a tape drive. A ram disk is VERY fast, faster than a hard disk. The ADAM's CP/M ram disk contains 52K of space. This is kind of small, but it is better than nothing. (Some IBM's have 1 Meg or 1000K worth of ram disk!!!) You can use ADAM's ram disk to store and execute slow running or time intensive programs.

An application that comes to mind is when you begin to write your own assembly routines. The assembler and load program can reside in ram and small programs can be complied there. Another excellent use of ram is to put the disk reset program (from two issues back) and "PIP". You could then copy from one drive to another (especially the disks drives) very fast. When you put a new disk in, you would not have to hit "control-c" to "log" the disk in, just M:dskrst. It is also helpful to have 1 disk full of your utilities (with all the utilities available, these might be more than one disk!). Some of these that are real useful are: A "squeeze" and "unsqueeze". Essentially, these pack and unpack the data on a disk so that when packed you can fit more. You need the unsqueeze so that you can restore the file to its "normal" state. There are "library" utilities that put related files into one "package". You can then "extract" them as you use them. Many of these utilities came about to make sending them over the phone lines by modem easier and less time consuming. There are some library utilities that squeeze, unsqueeze and have provisions for executing them from the library without having to extract them. In all cases, the only way to know exactly what a program does is to read "doc" files and "txt" files. You use the "type" command. Hit "control-p" BEFORE typing the file out to send it to your printer.

To really do "serious" CP/M work, you really do need a "dot matrix" printer. These typically print 10 to 20 times faster than SmartWriter! They cost between \$150 and \$500 for the cheaper ones and just about all will work on the ADAM with a "parallel" interface. There are a variety of them available-EVE, Orphanware, Capitol, etc. The reason you need a fast printer is that typically, a ".doc" file is 20K or more. This is roughly 10 or pages! SmartWriter prints real well if you have under 5 pages or so and no tractor feed. Even with a tractor feed you need to wait real long for a 10K document to print. In CP/M almost every utility has a well-documented help file that is easier read on paper than on a 30 line or so screen.

Finally, learn to use wildcards when manipulating files on your tapes

or disks. They are well-documented in the CP/M handbook that came with the disk or DDP. The easiest one to learn is the "\*". Using this means it will match all files with the same one you designate. To copy ALL the files from one tape or disk to another, you would use "\*.\*". To copy ALL executable files (\*.com) from one disk or tape to another, simply use "\*.com". You could also use wildcards to erase files. To erase all backups to make more room on your disk or DDP, just "era \*.bak".

I hope these tips help you...If you use others not mentioned, send them in and I'll publish them...Stay tuned..

#### The Mod Corner

I must reiterate that if you like these modifications, send \$2 to James Walters. Walters Software \* RD#4 Box 289-A \* Titusville, PA 16354 He came up with these mods and deserves a return for his work. Anyone who sends a DDP or disk to me for modifying, I will send him \$2 from the \$5 you send me.. You must also send the label from the original tape and all checks are made out to STEVE GEORGE.

Once again, refer to the article from the last issue as I cannot repeat the basics due to lack of space. All addresses are in decimal.. If your disassembler only outputs HEX, convert the address to HEX (see same article). In this issue we will examine Buck Roger's. As usual, DO NOT ATTEMPT TO MODIFY any original disk or tape (especially tapes.. they have no "write-protect" feature).. I cannot assume responsibility for accidents. Be careful... After you load your disassembler, do the following:

##### TAPE block to DISK block:

|            |                   |
|------------|-------------------|
| *copy 0-26 | 0-26              |
| " 151-159  | 102-110           |
| " 29-39    | 27-37             |
| " 163-172  | 111-120           |
| " 41-52    | 38-49             |
| " 174-186  | 121-133           |
| " 53-61    | 50-58             |
| " 187-197  | 134-144           |
| " 65-73    | 59-67             |
| " 75-84    | 68-77             |
| " 222-225  | 145-148           |
| " 85-97    | 78-90             |
| " 131-140  | 91-100            |
| " 141-141  | 101-101 (1 block) |

\*load block 0 from tape and change the following:

Address 27 to a (4).. Note: The "8" designates a Device number for tape .. "4" is the disk drive

" 43 to a (4)  
" 57 to a (4)

\*copy block 0 to disk

\*load block 6 from tape and make the following changes:

```

Address 198 to a 4
"    238 to a 4
"    529 to a 102
"    534 to a 27
"    539 to a 111
"    544 to a 38
"    549 to a 121
"    554 to a 50
"    559 to a 134
"    564 to a 59
"    569 to a 68
"    574 to a 145
"    579 to a 78
"    584 to a 91
"    589 to a 101
*copy block 6 to disk
*load block 91 (131 tape) and make the following changes: Address 987
to a 101
"    725 to a 4
"    765 to a 4
*copy block 91 (131 tape) to disk as 91

```

If everything is correct disk should boot from drive C If you notice, the changes to block 6 were to the Overlay Control Block. The different numbers correspond to where you put the different screens on the disk ....Let me know if you have any questions..if you want more mods WRITE to Jim Walters...He has other projects in mind (like question packs for Jeopardy and Family Feud)...these will only get completed if he sees there is support..

#### **Epilogue: The Empty Carriage Return in SmartWriter**

Well I figured we did not hear the last of this problem! It seems I frustrated you all even more with the solution. It seems that it made the problem worse in some cases. Try this solution submitted by Norm Taub: After every return, you should have ON THE NEXT BLANK LINE, an open subscript, then ONE blank space (using space bar), then a close subscript, followed by a return. This must be on the next line all the way to the left. Let me know if this works any better!

#### **Basic Column**

This issue we will depart from our usual BASIC listing and give you hackers out there some real neat information. We will look at the BASIC boot block loader. A very helpful ADAMite, George Havach posted this to CompuServe. He is head of B.R.A.I.N. (I think it stands for Bay Regional Adam Information Network). If you disassemble block zero of the SmartBASIC tape (with MOD for example, you would see the decimal equivalents of "code"column. For instance, the first three HEX addresses are F3, 18, and 0E. In decimal this would be a 243, 24, and a 14. A competent programmer could then easily substitute his/her own code and get a bootstrap program for just about any application. One example that comes to mind is the Cart Copier that is used in Hacker's Guide is utilizes a modified SmartBASIC booter to look for and execute the

different cartridges in the directory.

```
=====
 COLD_START_LOADER_for_SmartBASIC(tm)
=====

'BOOT' block 00H (on COMPUTER RESET, loaded into RAM beginning at
address C800H [51200D])

-----  

Disassembly and comments by George Havach [70337,3062]
=====
```

| byte | hex  | count | addr | code | instruction             | comment                              |
|------|------|-------|------|------|-------------------------|--------------------------------------|
| 1    | C800 | F3    |      |      | DI                      | ;shut off interrupts...              |
| 2    | C801 | 18    | 0E   |      | JR C811                 | ;and jump to main routine            |
|      |      |       |      |      | ;                       |                                      |
|      |      |       |      |      | /* File Particulars */  |                                      |
|      |      |       |      |      | ;                       |                                      |
| 4    | C803 | 42    | 41   | 53   | 49                      | ;file name = 'BASICPGM' (last char   |
|      |      | 43    | 50   | 47   | 4D                      | ;is a frowning face!), terminated... |
|      |      |       |      |      | 02 03                   | ;by an end-of-text marker            |
|      |      |       |      |      | (03H)                   |                                      |
| 14   | C80D | 00    | 01   |      | DEFW                    | ;load/start address = 0100H          |
| 16   | C80F | 1C    | 00   |      | DEFW                    | ;file size = 1CH (28D) blocks        |
|      |      |       |      |      | ;                       |                                      |
|      |      |       |      |      | /* Main Routine */      |                                      |
|      |      |       |      |      | ;                       |                                      |
| 18   | C811 | 31    | 58   | FE   | LD SP,FE58              | ;use EOS_STACK                       |
| 21   | C814 | 78    |      |      | LD A,B                  | ;get current device # from B reg.    |
| 22   | C815 | 06    | 01   |      | LD B,01                 | ;set file mode (1 = read)            |
| 24   | C817 | 21    | 03   | C8   | LD HL,C803              | ;get location of file name           |
| 27   | C81A | CD    | C0   | FC   | CALL FCC0               | ;_OPEN_FILE                          |
| 30   | C81D | 28    | 03   |      | JR Z,C822               | ;if no file (NZ), then...            |
| 32   | C81F | C3    | E7   | FC   | JP FCE7                 | ;_GOTO_WP(jumpstart to SmartWriter)  |
| 35   | C822 | 32    | 04   | D0   | LD (D004),A             | ;else store the device number...     |
| 38   | C825 | CD    | 3E   | C8   | CALL C83E               | ;and start loading the file          |
| 41   | C828 | FE    | 00   |      | CP 00                   | ;check for a read error              |
| 43   | C82A | 28    | 03   |      | JR Z,C82F               | ;if no error, then close file        |
| 45   | C82C | C3    | E7   | FC   | JP FCE7                 | ;else default to SmartWriter         |
| 48   | C82F | 3A    | 04   | D0   | LD A,(D004)             | ;use device number as the filenumbe  |
| 51   | C832 | CD    | C3   | FC   | CALL FCC3               | ;_CLOSE_FILE                         |
| 54   | C835 | 28    | 03   |      | JR Z,C83A               | ;if no error, then start SmartBASIC  |
| 56   | C837 | C3    | E7   | FC   | JP FCE7                 | ;else default to SmartWriter(ho-hum  |
| 59   | C83A | 2A    | 0D   | C8   | LD HL,(C80D)            | ;get starting address of the progra  |
| 62   | C83D | E9    |      |      | JP (HL)                 | -->program entry point               |
|      |      |       |      |      | ;                       |                                      |
|      |      |       |      |      | /* Read-File Routine */ |                                      |
|      |      |       |      |      | ;                       |                                      |
| 63   | C83E | 21    | 0D   | C8   | LD HL,C80D              | ;transfer file particulars...        |
| 66   | C841 | 11    | 00   | D0   | LD DE,D000              | ;to a handy place                    |
| 69   | C844 | 01    | 04   | 00   | LD BC,0004              |                                      |
| 72   | C847 | ED    | B0   |      | LDIR                    |                                      |

```

74 C849 21 02 D0 LD HL,D002 ;set up a block counter...
77 C84C 35 DEC (HL) ;and decrement it by 1
78 C84D 3A 04 D0 LD A,(D004) ;A = device number
81 C850 2A 00 D0 LD HL,(D000) ;HL = buffer address (pointer)
84 C853 01 00 04 LD BC,0400 ;BC = number of bytes to read
87 C856 CD D2 FC CALL FCD2 ;_READ_FILE
90 C859 20 16 JR NZ,C871 ;if error, then jump to subroutine
92 C85B 01 00 04 LD BC,0400 ;else increment the buffer address
95 C85E 09 ADD HL,BC ;by 1 K...
96 C85F DD 21 00 D0 LD IX,D000 ;and transfer the new value...
100 C863 DD 75 00 LD (IX+00),L ;to the pointer
103 C866 DD 74 01 LD (IX+01),H
106 C869 3A 02 D0 LD A,(D002) ;check block counter
109 C86C FE 00 CP 00 ;last block loaded yet?
111 C86E 20 D9 JR NZ,C849 ;if not, then continue readingfile
113 C870 C9 RET ;all done!
;
; * Read-Error Subroutine *
;
114 C871 3E 01 LD A,01 ;set A reg. non-zero
116 C873 C9 RET ;back to main routine

```

\*Editor's Note...You'll see above to references to "device number"...If it's a disk it will be a 4..tape will be an 8.To modify you BASIC tape to run off the disk you'd need to change one of the 8's to a 4 (the second one I do believe). This can be accomplished a variety of ways...one is to simply change the actual block zero on a BACKUP of the tape (with MOD)..OR you can poke the number in BASIC but it would have to be poke'd in decimal where it gets loaded in (since BASIC gets loaded in starting at address 51200D, you'd have to offset the poke the number of bytes the actual instruction is stored (should be 51278D)..one way to really learn is by fooling around with this..just DO NOT use your originals!! You really could be surprised at how easy it is! If you have any questions, please send them to me! Till next issue....

#### LOCATE EOS CALLS SUPERGAME TAPES

I found this program on Compuserve. Looks like it could be quite useful for you "hackers" out there. You might want to modify as suggested in "doc" file. Might help figuring out what drive ADAM is looking for when loading a SuperGame, and where screen overlays are located.

++++++  
This program, written in SmartBASIC by Guy Cousineau, searches for all I/O related EOS calls starting in Block 0 of a supergame tape, for example. It reports the offset from the start of the block, useful for a block editor, and the type of call. For your purposes, It may report too many types of calls but completeness is desirable. Possible extensions: a second pass that would report calls to locations identified in the first pass.

---

```

4 ? "INSTRUCTIONS y/n":GET q$:IF q$<>"n" THEN GOSUB 1000
5 DATA 62,4,1,0,0,17,18,0,33,48,117,205,243,252,201,

```

```

10 FOR x=1117 TO 1131:READ y:POKE x, y:NEXT
15 LOMEM :31111:D$=CHR$(4):GOSUB 300:ONERR GOTO 2000
20 FOR b=0 TO 159:POKE 1123, b:CALL 1117: f3=0
30 FOR x=30000 TO 31021: y=PEEK(x):IF f1 THEN GOSUB 100
40 IF f2 THEN GOSUB 200
50 IF y<>205 GOTO 90
60 p=PEEK(x+2):IF p<>252 AND p<>253 GOTO 90
70 z$=js(PEEK(x+1)):IF z$="" GOTO 90
75 IF NOT f3 THEN 7:?"BLOCK "; b: f3=1
80 ? x-30000; TAB(6); " CALL "; z$
90 NEXT
91 f2=(PEEK(31023)=205)
92 f1=(PEEK(31022)=205):IF f1 THEN f2=PEEK(31023)
99 NEXT:GOTO 2000
100 IF PEEK(30000)=252 THEN ? x-30000; TAB(6); ; " call "; js(f2) 110
    f1=0: f2=0:RETURN
200 IF PEEK(30001)=252 THEN ? x-30000; TAB(6); ; " call ";
    js(PEEK(30000)) 210 f1=0: f2=0:RETURN
300 DIM js(255),
310 READ x:READ js(x):IF x GOTO 310
311 INPUT "filename "; fs:IF fs="" THEN RETURN
312 INPUT "drive number "; dn:IF dn=5 THEN ? "ILLEGAL OPTION":RETURN
313 ? :? D$:;"mon o"
314 ? D$;"open "; fs; ",d"; dn:? D$;"write "; fs
315 ? "insert disk to read in drive 5":GET qs
320 RETURN
330 DATA      51,console      display,57,screen      display,99,print
    buffer,102,print character,105,read one,
340 DATA      108,read key,111,read device,117,read device,156,start
    print buffer,159,start print chr,
350 DATA      162,start read block,168,start read key,171,start write
    block,180,write one block,243,read block,
360 DATA      246,write block,249,mode check,17,bank switch,26,write
    VRAM,29,read VRAM,32,write VDP,
370 DATA      44,put VRAM,47,get VRAM,59,write sprites,62,read
    joystick,0,,, 1000? "this utility reads all blocks of a disk in
    drive 5 and looks for I/O type system calls."
1010 ? "The block number is printed only if a call is found in
    thatblock." 1020? "The other information supplied is the offset
    from the beginingof the block and the routine called."
1030 ? "To output to a file, specify the name and the drive number."
1040 ? "To suppress the file simply enter <return> for file name."
1050 ? "Optionally, you can turn on theprinter before running the
    program." 1060?:RETURN
2000 CLRERR:?:? D$:;"close "; fs:?:? D$:;"nomon o"

```

#### **#1 ADAM USERS GROUP - Public Domain Software Exchange**

Please continue sending your submissions to the Software Exchange..A new program we have gotten is an unreleased (or released in very small quantities) cartridge that tests system memory, the printer, keyboard, and tape drive. It should have been bundled with the ADAM! In order to use this program, you need CP/M 2.2 and the 64K memory expansion. The program must reside in the upper 64K because to test the lower

emory, it must write to it and if it was in there, it would crash the system. Also have a demo cart (#35) that was supplied with the first DAMs to go in stores...It is nice to look at (it just shows some of the programs designed and is all graphic). I have had a small problem with #15 (which is NIAD BASIC #1). It seems whoever copied it, copied it with a bad drive or something as most of the files do not work. I could appreciate any member who has a working copy (one way to tell is to run the font editor), send me a copy. Anyone who has received this from me and it did not work, I'll will copy it over. Be sure to send ALL correspondence about the Software Exchange to me. I can only answer questions if you send a SASE! Will also try to answer phone calls (when I am there) but WILL NOT accept collect calls. I will call you back (I have an answering machine) if you specify to call collect.

STEVE GEORGE - 67 STEVENS AVENUE - OLD BRIDGE, NJ 08857

A little about the help files on the various disks: SmartWriter HELP files have an "H" designation. CP/M help files have a ".DOC" or ".TXT" extension. These can be read by using the "type" command. You can print them out by hitting the Control key + the P key (this toggles the printer on and off in CP/M). Following is an example: A.> type filename.ext <return> On BASIC disks any file with an "H" designation can be read in SmartWriter. These are usually "README" files.

**Rules: For the Software Exchange**

- 1.) Make all checks payable to "STEVE GEORGE". Postal or Money orders are filled immediately. If you send a personal check expect a 3-8 day delay. Stamps are also accepted. Most disks will go out NEXT DAY!! (I hate to wait for software too!).
- 2.) Questions about programs will be only answered if you send a SASE.
- 3.) Updated list of programs available send a SASE + \$1 (to cover costs)
- 4.) If you have nothing to contribute, a \$12 donation is required. I will ONLY supply disk format. This will cover handling, postage, and purchase of disk. If you do not have a disk drive, send a LORAN, M.W. Ruth "PLAIN LABEL", or COLECO DDP + \$10 to cover handling and postage (Victory and FastForward DDP's are unreliable). I will also include an updated disk list with your order.
- 5.) If you have programs to donate, include a README file + \$2 to cover postage and handling. I will copy your files off and then put the requested disk/DDP on YOUR disk. I will accept DDP only if they are the above-mentioned DDPs. You can send me stamps if you want to.
- 6.) You will not always get the same disk you sent. We use single-sided, double-density disks only.
- 7.) If you order more than 10 disks take 15% off \* 20 or more take 20% off
- 8.) You must be a member of our #1 ADAM USERS' GROUP.

**#1 ADAM USERS GROUP  
Public Domain Software Exchange - Programs (DP/D)**

- Disk #1 - CP/M: MBOOT3 - Simple binary file upl/dl, Filter - from ADAM CP/M manual (Chpt 4), FICOPY - file disk copier modifier written in CP/M, can edit anything on a disk
- Disk #2 - CP/M: Cart Utility, ROMHEX - Dump carts contents in hex/ascii format, Cartcopy - copy carts to a disk. Creates.com file.

- Carts can be run and moved easily., RSTDISK -Tired of typing CTRL-C? Use rstdsk! This disk also has the SOURCE CODE to the cart copier for easy modification.
- Disk #3 - BASIC: BALOON - great sprite game, MOD - use w/Packcopy to edit DDP/Disks, 3D Tictactoe, Dueling Cannons - hires game, HELLO -access any disk easily, Brickout - Different than Bonanza version, Lunar Lander - classic text game, LANDER - shape table graphics, STAR TREK - joystick controlled text adventure, LIFE -graphic population study, BLACKJACK - text, HANOI -graphic game, Paint -has save feature, Eliminator -Hires graphic shoot-em'-up, Many other files....
- Disk #4 - CP/M: Master Catalog System - Entire cataloguing system for your disks...Access any file from your CP/M disks easily
- Disk #5 - BASIC: BACKUP.TAPE - can be modified to backup disks, CARTCOPY - (Not as good as Multicart, but it does work!), TAPEDITOR -Create versions of any software, YAHTZEE, CPMFILTER - to "clean" files from CP/M to BASIC, CROSSFIRE - graphic game; GET EM' -graphic game SMARTDRAW! - w/save feature, COLORST - test screen colors of monitor Many other files...
- Disk #6 - CP/M: LU.COM - Library Utility, SQ.COM - "squeeze" all files 40% with this utility, USQ.COM - "unsqueeze" files that have been squeezed, DUU.COM - Ward Christiansen's famous CP/M disk utility, LOGALL.COM/.DOC, BUGS.COM, MEMMAP.COM, SORT.COM
- Disk #7 - CP/M: Z80 Programmer - Specialized, use w/#8
- Disk #8 - CP/M: SCRNCNCHOP.COM, Z80 Programmers II, Specialized use w/#7
- Disk #9 - CP/M: EBASIC.COM - A basic for CP/M..One of the first! Compiled NOT - interpretive, EBASIC.DOC - Documentation for EBASIC, ERUN.COM - The COMPLIER for EBASIC, NSW.P.COM/.DOC, EDIT.COM/.DOC -Better than Adam's ED.COM!
- Disk #10 - Telecommunications Package: MADAM7 - (Use ADAM Modem...Has auto dial/ans feature..Better than ADAMLINK III), MEX (Modem Executive) - Also self-dialing Programmable keys function, Phone book, SCNCRNCH.COM-yet another screen chop Docs for all
- Disk #11 - Z80MAC.LBR - (Need LU.COM to extract files) Fully featured assembler, w/docs A must for serious programming, SOURCE.LBR - Use w/Z80MAC to ;create Z80 code or change 8080 code to Z80. Can create .ASM files from .COM files! - Includes all docs...also usq.com, lu.com
- Disk #12 - CP/M:CP/M ADVENTURE-Classic comes to ADAM includes scr. chop
- Disk #13 - BASIC: Personal Finance Planner, CHRUNCHER - similar to Turboload, compresses BASIC programs to run 10 times faster!, COLORCALC DISKINIT, CISPICT-read hires pictures done by other computers \*includes some examples, HIREEASEL, MOVEFILES, UTILITYMOD, HI - Q
- Disk #14 - BASIC: EVILTEXT, BATTLESHIP, JOINFOUR, CHECKERS, SERPENT, MATHBLS, MENUPRG, SPACE, SCHEDULE, MAYANQUILT All above include doc files
- Disk #15 - BASIC: (from NIAD's Exchange..This is a fantastic disk... probably best ADAM PD BASIC disk ever!!!), BACKGROUND, BLOCKS, CRAYONS CANON3 - music, KBEXAMPLE, NOISEMAKER, FDUMP -Fantastic!, BICOOLR -Background/text color changes, INSTANT, FATFONT -makes ADAM look like PC JR in 40 col mode, SPRITEDIT, CONVERT, ICECREAM, FDUMP2 USAMAP..AND much more!
- Disk #16 - BASIC: ROCK w/DOC, HOCKEY w/DOC, GAMESBUS, MASTERMIND,

STRONGHOLD w/DOC, MINEFIELD w/DOC, TEXTROCKET, METRIC  
CONVERTER -converts common metric measurements to USA  
measures and vice versa

Disk #17 - CP/M: MUMPS - a database file system for ADAM VERY complete  
you need #18 too.

Disk #18 - CP/M: MUMPS II - use with disk #7 VERY complete!

Disk #19 - CP/M: SPLIT.COM - Break large data file into small ones,  
I/OMAP.COM, BASEBALL.COM, SECURE.COM, /.COM - link commands,  
HALLEY-follow the comet, INVENTY.COM, Documentation included

Disk #20 - CP/M: DU-V89 - a more recent version of DUU, TYPTRYT.LBR -a  
CP/M typing tutor, MLOAD24, XCCP.LBR, XCCPUTIL.LBR,  
MARKET.COM, XRAM -test your RAM disk memory

Disk #21 - CP/M: SMALL-"C"-a 'C' compiler for the ADAM!, UNIXTOOL.LBR

Disk #22 - DDTF.COM,.DOC,.LBR, FIND.LBR, HOLD.COM,.DOC, KILL.COM,  
SUPERZAP.LBR, ENCRYPT.LBR, TRIVIA.LBR - Play trivial pursuit

Disk #23 - CP/M: BISHOW.ASM,.COM, LDIRR.LBR, QK21.PRM, YANCTERM.PRM,  
CERTIFY.LBR, PROBE.LBR, Z80 CHESS, (see LU.COM or NULU.COM  
to extract the files)

Disk #24 - CP/M: COBOL for the ADAM! Includes ALL one would need to  
program COBOL on ADAM 1 Full disk!

Disk #25 - CP/M: ORGCHOP.COM, FINDBAD.COM, CONT.COM, PRINT.COM,  
MAKBATCH.COM, DISPLAY.COM, SLOAD.COM, CATPAGE.COM,  
CATLBR.LBR, MCAT -41.LBR

Disk #26 - CP/M: FORTH for the ADAM!! 1 Full disk with documentation \*  
everything one needs to program FORTH on the ADAM!!

Disk #27 - LOGO: A full disk of logo utilities and games

Disk #28 - CP/M: A full featured BBS program - RBBS (Remote Bulletin  
Board System) Squeezed 159K!!!

Disk #29 - Coleco-Never released.....Jeopardy

Disk #30 - Coleco-Never released.....Troll's Tale

Disk #31 - Coleco-Never released...Best of Electronic Arts  
\*Hard Hat Mack \* Pinball Construction Set

Disk #32 - Coleco-Never released...Super Sub Roc-90K!! Much better than  
cart. version!!

Disk #33 - Video Hustler..Never released

Disk #34 - Test Cart..Test system peripherals, printer, DDP, etc..Need  
64K expander, CP/M to run...

Disk #35 - BASIC- Misc BASIC files from NIAD/AUG Users Group Library

Disk #36 - BASIC-BBSKit (Updated Bulletin Board Sys. for Adam in BASIC)

#### WANTED

If you would like to have an announcement made or sell something, as a  
member of the #1 Adam Users' Group, you can have it listed here.

Dave McIntosh - 7 Monsarrat Crescent, London Ontario N5Y 4Y7, 1-519-  
679-0578. Would like to hear from Adam users, from anywhere.

#### Information about other USERS' GROUPS.

Articles, information, and reviews. LET'S KEEP ADAM MOVING - YOUR HELP  
IS NEEDED -SEND AS SOON AS POSSIBLE anything you feel that other members  
would like to know about, ATTN: EDITOR to our Cherry Hill, NJ address.

If you are a member, please pass this application to another Adam user.  
+++++  
Dear Adam User,

To meet the challenge of the expanding need for computer awareness, the #1 Adam Users' Group cordially invites you to enter the fascinating world of computers by joining our group.

Membership to the #1 Adam users' Group is \$15.00 per year, \$16.00 if you use visa/master (US Funds only). This will be used to operate our group (mailings, newsletters, programs etc.). Please fill out the membership application to give us a direction on what you want.

1. "SPRITE CHASER" the official newsletter of the #1 Adam Users' Group.
2. We will give you the most advanced updates on the Adam.
3. Problem solving - Send us your questions and/or problems - ideas or solutions that you have discovered. Between us or other members we will try to give you answers.
4. Exchange Program - Send us programs that you wrote and we will publish them, with all credits given to you. All members will be given the list of all library programs.
5. We will be reviewing all types of software and hardware.

The above only represents a small sampling of what you will receive as a member of the local, national and international, #1 Adam Users' Group. We are a large group, but will always try to tailor to our individual member's needs.

Please fill in the application, and mail this with your Membership dues of \$15.00 so we can send you, your membership card to get started.

APPLICATION - Please print

Name: \_\_\_\_\_ Age: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone [Home] (\_\_\_\_\_) \_\_\_\_\_ Phone [Work] (\_\_\_\_\_) \_\_\_\_\_  
Name of any other items you have for your Adam: \_\_\_\_\_

Interest: \_\_ Entertainment \_\_ Business \_\_ Utilities \_\_ Education  
\_\_ Word Processing Other: \_\_\_\_\_

What would you like to see developed in either software or hardware?:  
\_\_\_\_\_

Do you also have another computer? \_\_ No \_\_ Yes \* Which? \_\_\_\_\_  
Do you have knowledge of another computer language, if yes which?: \_\_\_\_\_

Will you write articles for the newsletter? \_\_\_ Yes \_\_\_ No

Will you write programs for the newsletter? \_\_\_ Yes \_\_\_ No

Will you test products & write a report? \_\_\_ Yes \_\_\_ No

Comments: \_\_\_\_\_

**ADAM OUTLET**

|  |              |              |
|--|--------------|--------------|
| DATA PACK (Adam)   | 1/\$3.95     | - 10/\$37.50 |
| RIBBON CART. (Adam)  | 1/\$5.50     | - 3/\$15.00  |
| DISKS (Adam)   | 30/\$30.00   | - 10/\$10.95 |
| DAISY WHEEL (Adam) - Italic, Script, Elite, etc.   |              | 1/\$5.50     |
| ADAM COVERS - Set with Logo for system   | \$17.95      |              |
| ADAM DISK COVER - To match above   | \$8.95       |              |
| Paper T/F-F/F White 9 1/2x11. 20lb.  | 1000/\$20.95 |              |
| Labels T/F-F/F (Address)   | 1000/\$6.95  |              |
| Index Cards - T/F-F/F - 3 x 5"   | 1000/\$5.95  |              |
| Rolex Cards - T/F-F/F-2 1/6 x 4"   | 500/\$7.95   |              |
|  | 500/\$8.95   |              |
| 64K MEMORY EXPANDER  | \$69.95      |              |
| DIGITAL DATA DRIVE   | \$24.95      |              |
| TRACTOR FEED for Adam printer  | \$79.95      |              |
| PRINTER STAND -Front ON/OFF switch   | \$19.95      |              |
| POWER PACK - To separate printer/use CPU alone   | \$29.95      |              |
| Disk Holder - Holds up to 50 disks-anti/static   | \$15.95      |              |
| Monitor/TV Stand-360 rotation, up to 12.5 angle  | \$29.95      |              |
| PACKCOPY - Backup SmartBASIC etc.  | \$29.95      |              |
| DIABLO -Mind challenge - Graphic   | \$19.95      |              |
| BLACK GOLD - Look for oil. Survey-profits-fun  | \$19.95      |              |
| BOUNTY HUNTER - Text adventure   | \$14.95      |              |
| ADAM ENTERTAINER - Book (sound,graphic etc.)   | \$12.95      |              |
| LEARNING TOGETHER with ADAM - Book w/LOGO  | \$ 9.95      |              |
| RIB - Basic tutor for Adam (D or DP)   | \$24.95      |              |
| EBU - SmartBasic - Data Pack or Disk   | \$21.95      |              |
| HACKER'S GUIDE TO ADAM - Disk or DP  | \$17.95      |              |
| SIGNSHOP - Design & Printing System(DP)  | \$22.95      |              |
| MULTIWRITE - 64 COLUMN Word Processor (DP)   | \$37.95      |              |
| TurboLOAD - Revolutionary new product. Speeds up loading programs, also included the FILE ORGANIZER. | \$28.95      |              |
| PaintMASTER - Hi-Res graphic design system in machine language. Load/save your creation to D or DP   | \$22.95      |              |
| MULTI-CART BACKUP - Backup cartridges  | \$19.95      |              |
| S&H-\$2.50 US  |              |              |
| S&H-\$4.50 CN  | VISA         |              |
| US \$'s only   | MASTER       |              |

**M.W. RUTH CO., Dept. 1AD76**  
510 Rhode Island Ave.  
Cherry Hill, NJ 08002  
(609) 667-2526

**FREE CATALOG - We stock what we sell, for FAST DELIVERY**

**RETURN POSTAGE GUARANTEED**

**#1 ADAM USERS' GROUP**  
P.O. Box 3761  
Cherry Hill, NJ 08034